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Abstracts Of Oral and Poster Presentations

% Silt Content, , 3.23% Moisture Content, , 0.62Specific gravity, 52.17% Liquid Limit, 42.16% Plastic Limit, 10.01% Mouldability/ Plastic Index, , 79.36% L.O.I., 1400°C Sticking Point, , 1500°C Sintering Temperature, 1.75 mgm^{-3} Bulk density, 12.63Mpa Cold Crushing Strength, 17.85% Apparent porosity, 17.27 % Linear Shrinkage, 23.31% Total Shrinkage and 14 cycles Thermal Shock. Iganna **clay gave;** 5.27 pH, 76.72% Silt Content, , 0.56% Moisture Content, , 0.63 Specific gravity, 52.17% Liquid Limit, 42.16% Plastic Limit, 10.01% Mouldability/ Plastic Index, , S0.20% L.O.I., 1250°C Sticking Point, , 1400°C Sintering Temperature, 1.70, mgm^{-3} Bulk density, 11.20 Mpa Cold Crushing Strength, 16.S0% Apparent porosity, 4.00 % Linear Shrinkage, 10.98% Total Shrinkage and 15 cycles Thermal Shock.The physical constituents of each of the sample is within the reported standard levels for clays suitable for production of refractory materials, especially, tile. Consequently, these clays mineral are recommended for tile making.

Keywords: Clay minerals, tile, refractory, physical characterization,EDXRF.

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Development Of Biodegradable Polyetheramide-Urethanes From Castor Seed Oil

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Castor seed oil (*Ricinuscommunis*) is a vital renewable base material for industrial production of lubricants, brake fluids, soaps, inks, pharmaceuticals, plastics, perfumes etc. The presence of reachricinoleic acid (about 87.5%) content in its fatty acids profile confers on its essential use for coating purposes. This paper presents the synthesis, characterization and antibacterial evaluations of polyetheramide-urethanes (PETAU) prepared from *Ricinuscommunis* seed oil. N,N'-bis (2-hydroxyethyl) *Ricinuscommunis* fatty amide (HERA) was synthesized via aminolysis. Upon reacting HERA with bisphenolA, polyetheramide (PETA) resin was formed. The polyetheramide subsequently undergo urethanation to form PETAU. The synthesized PETAU was characterized by FT-IR, ^{1}H-NMR and ^{13}C-NMR spectroscopic analyses. Selected physico-chemical parameters of seed oil, HERA, PETA, PETAU were measured. Coating performance, thermal stability and antimicrobial properties of the cured resin were also evaluated.